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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,355	08/02/2000	Tetsuya Nishi	1046.1028D2/DSG	9683

21171 7590 01/29/2002

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EXAMINER

SHAHER, RICKY D

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 01/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/631,355

Applicant(s)

NISHI ET AL

Examiner

R.D. SHAFER

Group Art Unit

2872

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 months MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 11/01/01

☒ This action is FINAL.

- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 23-38 is/are pending in the application.

Of the above claim(s) 24, 25, 27, 29 AND 31 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 23, 26, 28, 30 AND 32-38 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some\* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_

☐ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other \_\_\_\_\_

Office Action Summary

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1. Claims 23, 26, 28 and 30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification, as originally filed, does not provide support for switching light from one input to one output by controlling only one of the first, second and third elements, as is now claimed, due to the fact that the first, second and third elements are passive optical elements which are not subject to the application of any supplemental energy.

2. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 32, line 9, the use of the language "only one switching element" is vague, indefinite and/or confusing. It is unclear to the examiner whether the above mentioned language lacks nexus with respect to the switching element recited in claim 32, line 7 or whether there is more than one different kind of switching elements within the claim. Thus, the metes and bounds of the claim is unclear.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claim 32 is rejected under 35 U.S.C. 102(b) as being anticipated by Healey et al ('140).

To the extent the claim is definite, Healey et al discloses an optical space switch comprising a plurality of polarization control optical switches (S1, S2, S3) connected together between a plurality of inputs (I) and a corresponding plurality of outputs (O), wherein each of said polarization control optical switches comprising a polarization controller (<sup>R1 R2 R3</sup>C1, C2, C3), and a switching element [(D1, D2, D3) or (B1, B2, B3)] for changing the optical path of light of the light from said controller, note figures 1-5, wherein switching light from one of said plurality of inputs to one of said plurality of outputs requires controlling only one switch element (R1, R2, R3) provided in the respective one of said plurality of polarization control optical switches.

4. Claims 33-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Healey et al ('140).

Healey et al discloses an optical space switch comprising a plurality of polarization control optical switches (S1, S2, S3), each having a plurality of inputs (I) and a plurality of outputs (O) connected together as a  $N \times N$  matrix, wherein  $N=1$ , each of the polarization control switches comprising a polarization controller (C1, C2, C3) and a switching element/means [<sup>R1 R2 R3</sup>(R1, R2, R3) and/or [(D1, D2, D3) or (B1, B2, B3)]] for selectively outputting the polarization changed light to a respective output of the respective polarization control optical switch, note figures 1-5, wherein switching light from a respective polarization control optical switch in a first column of the matrix

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to a respective output of a respective polarization control optical switch in the last column of the matrix requires controlling only one of the switching means (R1, R2, R3) in the matrix.

5. Claims 32-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al ('944).

Yamamoto et al discloses an optical space switch comprising a plurality of polarization control optical switches (A, B, C), each having a plurality of inputs (I) and a plurality of outputs (O) connected together as a  $N \times N$  matrix, wherein  $N=1$ , each of the polarization control switches comprising a polarization controller (not shown) and a switching element/means [(2A) and/or (3, 6, 7, 21A, 21B, 21C, 22)] for selectively outputting the polarization changed light to a respective output of the respective polarization control optical switch, note figures 17A-17B, wherein switching light from a respective polarization control optical switch in a first column of the matrix to a respective output of a respective polarization control optical switch in the last column of the matrix requires controlling only one of the switching means (2A) in the matrix.

6. Claims 32-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Dejule et al ('445).

Dejule et al discloses an optical space switch comprising a plurality of polarization control optical switches (S1,1...S3,3), each having a plurality of inputs (K1-K12) and a plurality of outputs (L1-L12) connected together as a  $N \times N$  matrix, each of the polarization control switches comprising a polarization controller (not shown) and a switching element/means [(F1,1...F3,3) and/or (B1,1...B3,3)] for selectively outputting the polarization changed light to a respective

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output of the respective polarization control optical switch, note figures 1-3, wherein switching light from a respective polarization control optical switch in a first column of the matrix to a respective output of a respective polarization control optical switch in the last column of the matrix requires controlling only one of the switching means (F1, 1...F3,3) in the matrix.

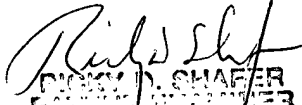
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

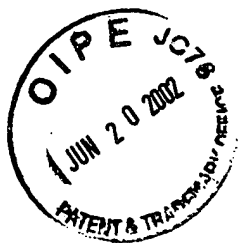
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication should be directed to R. D. Shafer at telephone number (703) 308-4813.

Shafer/ds

01/15/02

  
RICK D. SHAFER  
PATENT EXAMINER  
2872



Docket No.: 1046.1028D2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Tetsuya NISHI et al.

Serial No. 09/631,355

Group Art Unit: 2872

Confirmation No. 9683

Filed: August 2, 2000

Examiner: R. Shafer

For: POLARIZATION CONTROL OPTICAL SPACE SWITCH

RECEIVED  
JUN 21 2002  
TC 2800 MAIL ROOM

**COMMUNICATION REGARDING ASSIGNMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231


Sir:

The subject application is assigned to FUJITSU LIMITED of Kawasaki, Japan. The assignment was filed in parent application Serial No. 08/200,657 and is recorded at Reel 6974, Frame 0044. Applicants request that the assignment data be printed on the issued patent.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 6-20-2002

By:   
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